SPECIAL REPORT

SHATTUCK LECTURE

The Future of Care — Preserving the Patient—Physician Relationship

John Noseworthy, M.D.

In the 21st century, physicians in the United States are increasingly caught between the conflicting concepts of medicine as a humanitarian profession and health care as a competitive business. As a practicing neurologist and clinician—investigator who recently had the privilege of leading the Mayo Clinic for nearly a decade, I have gleaned some lessons and insights that may assist our profession in returning to its core values and essential priorities.

Amid the complexities and changes in health care today, medicine's most fundamental element remains the relationship between patient and physician. This relationship at the heart of health care has been a constant across cultures and centuries, and I believe it must remain central to medical practice even as medicine evolves. In order to ensure that it does so, we can advocate for two important principles that support this relationship. First, it is critical to enable physicians to spend adequate time with patients who need extra time, such as those with diagnostic uncertainty, those whose treatment plans are failing, and those at the end of life. Second, we need to identify and support the work of a coordinating physician for patients who are seeing multiple specialists, to ensure that everyone is talking with one another and, if there are disagreements, to clarify the diagnosis and treatment plan and help the patient make decisions about next steps. Working together, physician leaders and practicing doctors can take action to bring these elements to their practice.

BALANCING HUMANITY AND BUSINESS

Health care ranks as one of the leading domestic issues on the minds of Americans. Even as out-

standing U.S. medical centers, at the forefront of scientific discovery, provide some of the finest care in the world, our health care system often struggles to provide reasonable and affordable access to care, suitable approaches to payment, opportunities for innovation, and comprehensive care for patients with complex health issues or multiple coexisting conditions. Health care costs continue to rise despite continued downward pressure on the reimbursement models for hospitals and physicians, and health care administrators must ensure that their organizations perform well financially in an increasingly competitive environment. Patients and families worry about health care costs as well, fearing medical bills and the possibility of personal medical bankruptcy. Not surprisingly, concerns about affordability and greater access to government health care services ("Medicare for All" vs. a "public option") dominate the public dialogue.

At the same time, Americans are grappling with vast societal problems, such as unacceptably high maternal mortality, the tragedy of gun violence, and the opioid crisis, as well as disparities in access to such essential services as early childhood education and healthy nutrition. When their own health is affected, they seek answers from many sources, including the Web, social media, walk-in clinics, pharmacists, and others — or end up adrift in a fragmented health care system, where they don't get enough time with their clinicians and they suffer from the lack of a single trusted professional who can help them bring together disparate data points to arrive at unifying answers and a plan.

Attending to the business and financial aspects of health care is necessary, but this focus too often overshadows the human side of medi-

cine. A key attribute of physicians is the commitment to caring for others — the desire to reduce suffering and make a meaningful difference in the lives of patients, often at their time of greatest need. Yet it can seem to physicians that society rarely acknowledges their profession's efforts to build trust and provide service. Practicing physicians despair that the focus on costs has reduced them to cogs in the health care business machine, with daily reminders of ever-growing productivity expectations on top of crushing regulatory and clerical burdens. Remaining committed to their work, physicians in general have continued to accommodate these added demands. But in the absence of strong administrative support, investment, and innovation, the results are predictable: loss of joy in work, erosion of professionalism, and ultimately burnout.

The origins of burnout are complex, but the electronic medical record is often cited as a major contributor. Many physicians struggle to use technology in a way that enhances their enjoyment of their practice, and they resent spending more time doing clerical work than seeing patients.¹ Each week seems to bring more administrative and regulatory intrusion into their practice. They have heard the promises of a better future, when technology and new models of care will enhance the quality of care and their own professional satisfaction. But they have yet to see these rewards.

The identification of burnout as a national epidemic has promoted focus and collaboration on addressing it.2-5 The profession has invested substantially in research to elucidate and modify the factors contributing to the syndrome.⁶⁻⁸ Although more remains to be done, these investments have led to important insights that inform our ability to predict, prevent, and alleviate burnout. I would suggest that the solutions outlined above — allowing more time with patients when needed and designating coordinating physicians to reduce the fragmentation of health care merit similar consideration. Solutions on these fronts could result in approaches to care that improve outcomes, promote health, reduce wasteful spending, and support a sustainable, rewarding practice of medicine.

I believe the patient-physician relationship will remain fundamental to the future of health care and that we therefore need to invest in it once again. Healing begins when patients and their physicians build trust — a process that often takes time, especially when the patient's health and future are in jeopardy. There is no app for that. The medical profession will have to be creative in finding ways to serve our patients better.

OPPORTUNITY AND RESPONSE

Insufficient time with patients in need and the lack of care-coordinating physicians are emblematic of the fragmentation of health care, which leads to massive waste, delays, missed opportunities for cure, medical errors, and enormous dissatisfaction on the part of patients and physicians alike. The benefits to patients, physicians, and society of solving these problems could be enormous. For starters, eliminating the redundancy and unnecessary work attributable to fragmentation could save an estimated \$25 billion to \$45 billion per year.9

From the beginning, the founders of the Mayo Clinic believed that the practice of medicine meant a personal commitment to a life of service that would achieve its best effects if health care professionals worked together in teams. The institution was built on two durable and influential principles: "The best interest of the patient is the only interest to be considered, and in order that the sick may have the benefit of advancing knowledge, union of forces is necessary."10 These two principles — which map directly to my "adequate time with patients who need it" and "coordinated care" — have guided the Mayo Clinic since its inception. They have supported the institution through periods of immense disruption (two world wars, the Great Depression, and now another wave of health care reform) and, I believe, can help form a strong foundation for future care delivery in the United States, even in systems that lack the Clinic's resources.

Patients who have complex medical issues or multiple coexisting conditions frequently fall through the cracks in our health care system. They often express frustration that no one is taking responsibility for their total care. At the same time, all physicians understand that patients who require extra time present a challenge in a busy practice. Without a system that anticipates this need, either time is granted and the patients who are waiting to be seen next are in-

convenienced or time is not granted, which both frustrates the patient who has a complex problem and delays answers.

In a recent Journal article, Lisa Rosenbaum¹¹ wrote about a group of doctors who were part of a team that was created for critically ill patients with multiorgan involvement and a need for urgent decision making. The doctors held a Saturday-night telephone conference to analyze one patient's situation. After the call, Rosenbaum writes, "My first impression, 'What a remarkable interaction,' was followed closely by my second, 'It shouldn't be.' "Indeed, it should not be remarkable for physicians working in the same organization to collaborate in a patient's diagnosis and treatment. We should always practice medicine that way.

The leaders who are responsible for fostering an institution's culture can take the principles of adequate time and coordinated care into account when they contemplate practice redesign, management of schedules, institutional support for various types of visits, and expectations of physicians. The simple practice of assigning a coordinating physician to all patients could make intrateam communication and integration of care the norm rather than the exception. Interventions designed to inculcate in the medical staff a strong commitment to collaboration, including rewarding good team play as it leads to better care, would nurture a culture of teamwork and a standard of coordinated care.

ACTION ITEMS

With the pervasive emphasis on costs and efficiency, physicians have seemingly given up on unhurried time with patients. But we can rethink this norm and fight for our patients. A sound clinical and business case can be made for spending more time with certain patients. Having adequate time is often essential for reaching an accurate diagnosis and developing an appropriate treatment plan, and conquering those tasks efficiently can ultimately help bend the cost curve in health care. Clearly, not every encounter with a patient needs to be lengthy, nor does every encounter need to be with a physician; many issues can be managed best by advancedpractice nurses or others. But having the flexibility to spend more time with patients who need it reduces their suffering and helps both health care organizations and patients save money. It also boosts satisfaction for physicians.

Such changes can be made only if physicians who lead major health care institutions step forward and embrace change. These leaders can set the expectation that, with their support, physicians will own this opportunity to implement innovations that benefit patients. There is tremendous power in the partnership of physician and administrative leadership jointly focused on patients' needs. This approach includes bringing together all the members of a care team to identify the critical problems and then design and test solutions. Several steps are key:

Aligning physician engagement, administrative support, and the culture of the practice to effect change. Essentially, every medical practice has a mission statement stressing the primacy of patient care. Reminding everyone in the organization of that mission may inspire and support patient-focused changes. Institutions with a tradition of physician leadership will have a distinct advantage in moving this agenda forward. Once practicing physicians agree that certain principles are worth fighting for, administrative leaders can be brought on board.

Prioritizing identification of opportunities for innovation. The work of refocusing medicine on humans rather than finances needs to happen within individual practices, specialty groups, and hospitals. Physician leaders can work to achieve a consensus that problems involving issues of time and coordination are worth addressing and provide opportunities to identify innovative solutions. The magnitude and type of change needed will depend on the practice's profile.

Involving all the members of a team and rethinking the purpose of their work and the skills they bring to the practice. The amount of time and effort needed to change a practice's workflow depends on the team's maturity. Everyone, from the appointment secretary to the nurses and physicians, brings perspectives and insights that can contribute to effective change and collaboration, given sufficient time and trust in the team-building process. All the team members should be supported to work at their highest level of certification, and efforts at redesign should bring iterative improvements and a commitment to continue to invest in better solutions.

Identifying the key barriers to success. Technology should be an enabler to the practice, but electronic health records bring software and functionality issues as well as workflow and training challenges. Each of these challenges requires specific attention and resources, but solutions can be developed if there is broad engagement by care teams. Artificial intelligence, machine learning, and natural language processing offer solutions for patient triage, scheduling, order entry, and documentation, but they carry their own workflow and training challenges. If the care team is empowered to collaborate on solutions, then technology can take its rightful place as a tool, rather than being a barrier, and tasks such as record review, order entry, and documentation can be offloaded from physicians, allowing them more time with their patients.

Creating the role of coordinating physician. Building teams and trust across disciplines is a critical first step. Focusing an assembled group of specialists on the question of how best to meet the needs of the patient may help to address any turf issues and counterproductive practice patterns. It will be up to the organization to decide, on the basis of the specific case, which practitioner should be designated as the coordinating physician.

Building a partnership with administration for longterm support. Redesign efforts are always more difficult and time-consuming than expected. Even the Mayo Clinic, where teamwork is a bedrock principle, must provide constant support, resources, and institutional prioritization for taking time to work in teams — time that is always in short supply in today's climate focusing on productivity and volume. Relevant resources, such as consultants, seminars, and toolkits to guide practice redesign, also require institutional support. Institutional administrators, particularly in academic medical centers, will need to understand and support sustained investment of resources in change management and health care delivery research.

Mobilizing specialty groups to change reimbursement to properly reward additional patient service. These changes can be made at the local level, for example, by redesigning schedules and templates to build in flexibility based on either individual appointment types or clinic half-days. Ultimately, of course, reimbursement changes need to happen at the payer level, and that will be more difficult. Revamping payer reimbursement so that it covers time spent with patients and performance of the coordinating physician role will require validation of new metrics, including the speed and accuracy of diagnosis to reduce fragmentation, the appropriate use of diagnostic services to reduce costs, and the use of innovative follow-up visits with various members of the care team, including assembled groups of specialists (using telemedicine and other digital connections as necessary), to improve adherence and outcomes, as well as new measures of patient and physician satisfaction.

LEADERSHIP FOR CHANGE

Leading change efforts may be difficult, but changes that clearly benefit patients are more likely to succeed than changes that are designed to enhance financial performance. Mobilizing physicians and administrators to reduce the fragmentation of care, with obvious benefits for patients and physicians, will strengthen organizations' culture, engagement, brand strength, and financial performance. If it is planned well and accepted by physicians and other contributors, the redesigned system will run smoothly. The right thing to do will be the easy thing to do.

The substantial changes needed to create a high-quality, sustainable health care system can happen only with long-term thinking, societal will, and grit. The medical profession should be at the center of the effort to fix health care, yet it has gradually been backed into a passive position, as external factors have eroded the centrality of the patient-physician relationship. Active physician leaders can be the voice of the medical profession and speak for the welfare of patients within institutions, specialty groups, and medical societies. And we can collaborate with the government, payers, life sciences companies, investors, benefactors, and the public to make the system work better for patients as well as their physicians.

My inherent optimism leads me to trust that U.S. society will aspire to create an enviable and sustainable health care system and will ultimately prioritize and realize this goal. Maintaining a focus on patients' needs and the benefits of collaboration may seem dated or nostalgic,

but caring for the sick still demands personal interactions, supported by trust, evidence, experience, and technology. The patient-physician relationship is essential to healing, and it brings meaning and purpose to our profession and our

Disclosure forms provided by the author are available at NEJM.org.

From the Mayo Clinic, Rochester, MN. Address reprint requests to Dr. Noseworthy at the Mayo Clinic, 200 First St. SW, Rochester, MN 55905, or at mcadmin@mayo.edu.

- 1. Sinsky C, Colligan L, Li L, et al. Allocation of physician time in ambulatory practice: a time and motion study in 4 specialties. Ann Intern Med 2016;165:753-60.
- 2. Shanafelt TD, West CP, Sinsky C, et al. Changes in burnout and satisfaction with work-life integration in physicians and the general US working population between 2011 and 2017. Mayo Clin Proc 2019:94:1681-94.
- 3. West CP, Dyrbye LN, Shanafelt TD. Physician burnout: con-

tributors, consequences and solutions. J Intern Med 2018;283:

- 4. Shanafelt TD, Balch CM, Bechamps G, et al. Burnout and medical errors among American surgeons. Ann Surg 2010;251: 995-1000.
- 5. Shanafelt TD, Balch CM, Dyrbye L, et al. Special report: suicidal ideation among American surgeons. Arch Surg 2011;146: 54-62.
- 6. West CP, Dyrbye LN, Erwin PJ, Shanafelt TD. Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis. Lancet 2016;388:2272-81.
- Shanafelt T, Goh J, Sinsky C. The business case for investing in physician well-being. JAMA Intern Med 2017;177:1826-32.
- 8. Dyrbye LN, Shanafelt TD, Sinsky CA, et al. Burnout among health care professionals: a call to explore and address this underrecognized threat to safe, high-quality care. In: NAM perspectives. Washington, DC: National Academy of Medicine, 2017.
- 9. Berwick DM, Hackbarth AD. Eliminating waste in US health care. JAMA 2012;307:1513-6.
- 10. Mayo WJ. The necessity of cooperation in medicine. Mayo Clin Proc 2000;75:553-6.
- 11. Rosenbaum L. Divided we fall. N Engl J Med 2019;380:684-8. DOI: 10.1056/NEJMsr1912662

Copyright © 2019 Massachusetts Medical Society.

MY NEIM IN THE IOURNAL ONLINE

Individual subscribers can store articles and searches using a feature on the Journal's website (NEJM.org) called "My Account." Each article and search result links to this feature. Users can create personal folders and move articles into them for convenient retrieval later.